

modes of approach, consider the interaction between genetic and external influences in shaping the pattern of development. "Mental growth (or development), therefore, is a progressive differentiation and integration of the action systems and behaviour patterns of the total organism. Without implying any dualism, it is suggested that mental growth, like physical growth is a process of morphological organization. . . . Environmental factors support, inflect and modify, but do not generate the processes of development. Growth as an impulsion and as a cycle of events is uniquely a character of the living organism and neither physical nor social environment contains any architectonic arrangements even analogous to the mechanism of growth."

In the last chapter the principles of developmental diagnosis are outlined and its present limitations and medical aspects discussed. Throughout the work the authors keep close to their data of observation and present their views and findings clearly.

A. J. LEWIS.

## CONTRACEPTION

**Denham, Dr. Mary.** *Planned Parenthood: A Guide to Birth Control.* London, 1935. George Newnes. Pp. 136. Price 3s. 6d.

**Griffith, Edward F., M.R.C.S., L.R.C.P.** *Modern Marriage and Birth Control.* London, 1935. Victor Gollancz. Pp. 221. Price 5s.

**Bromley, Dorothy Dunbar.** *Birth Control; Its use and misuse.* New York, 1934. Harper and Brothers. Pp. 304. Price 10s. 6d.

Books on birth-control published to-day have to submit to a scrutiny from which their predecessors were immune. For one thing, there are so many of them, and they come at such a pace, that each newcomer is examined critically, often with hostility, for its claims to add to the existing congestion. The critics, too, are so much better equipped than

formerly. The practical data accumulated in the past fifteen years in birth-control clinics, and recorded in clinic reports and in the reports of the International Medical Group for the Investigation of Birth Control, have become the stock-in-trade of hundreds of medical practitioners throughout the country, many of whom can bring to bear upon any new work on birth-control a criticism based on established knowledge and often on an extensive personal experience. The production of birth-control books becomes easier each year: what is becoming increasingly difficult is to produce birth-control books with the slightest claim to originality.

That it can be done is proved by the three books under review. The first deals almost exclusively with the technique of contraception, the second with contraception as one among many of the problems of marriage, the third with—but such is its originality that it is difficult to say in a phrase what the third deals with: yet, though they differ thus from each other in their purpose and scope, they are alike in deserving a place in any representative library of contraception.

"Dr. Mary Denham" is a pseudonym, but to save the reviewer trouble the publishers kindly tell him whose identity the pseudonym conceals. Without betraying their confidence, it may be revealed that Dr. Denham is a recognized authority on the subject, with a clinic experience that is probably second to no one's in this country. She writes with commendable lucidity, and sets out her instruction systematically and with a lively appreciation of the difficulties of the general reader. There is very little fresh in the book, but that is not the fault of the author: there is very little fresh to say. What Mary Denham does supremely well is to present familiar facts in their proper perspective; and it may be added that she makes no major statement to which experts in the subject could take exception.

Dr. Griffith casts his net much wider. His aim is to instruct young people in every aspect of marriage, in the anatomical, physiological, psychological and spiritual truths that underlie its problems: nothing less than that!

The reviewer of such a work should state his prejudices, before offering his judgments. My own, I must confess, are against teaching in cold print facts that lovers should, and usually can, discover for themselves. Sexual anatomy and physiology, yes ; this is essential knowledge and it would be very difficult to impart it better than by the method employed in this book. But I cannot imagine that anyone can benefit from the elaborate descriptions of coital attitudes which many writers nowadays regard as an essential part of sexual education. Discovered spontaneously, such experiments may become highly desirable expressions of a sexual relationship ; but I believe, in despite of all the writers who, since the publication of Van der Velde's *Ideal Marriage*, have become emboldened to write practical guides to coitus, that the glamour departs from sexual love when these variants of what is called, invidiously, normal coitus are imparted by numbers, like army drill, and practised, as in such circumstances they inevitably must be, not in response to an inner necessity, but self-consciously, in strict accordance with the directions.

These are my prejudices, and doubtless any schoolboy can recognize what shameful complexes underlie them. But they are concerned with only one section of Dr. Griffith's book, and for the rest, allowing for inevitable differences of opinion on matters about which there does not yet exist a body of established knowledge, there can be nothing but praise, both for the author's purpose and for his achievement. The chapters on family limitation, the spacing of children, venereal diseases, abortion, sterility and sterilization, and sex education embody information for lack of which there exists a vast amount of preventable unhappiness ; and Dr. Griffith imparts it straightforwardly and with a sensitive regard for his reader's prejudices.

Contraception is dealt with very shortly. The exposition is confined almost entirely to principles, and the reader is referred to the sources from which more detailed instruction is obtainable. One small criticism : Dr. Griffith appears to accept the view that seminal fluid is absorbed through the vaginal mucous membrane with benefit to the female

partner in sexual intercourse. There is of course no reason why he should not ; but in matters which are still the subject of dispute and investigation, would it not have been the better course either to suspend judgment or to offer for the reader's consideration the data upon which the author's acceptance of these theories are based ?

*Birth Control : Its use and misuse* is the most original and readable book on the subject that has been published for years. Its originality lies less in the fact that it embodies new information—actually it embodies very little—than in the way in which it assembles, for the first time in one book, data on birth-control that are scattered through innumerable medical journals, government reports, and text books, and offers them in a form that is intelligible to the general reader, and instructive even to some who would regard themselves as authorities on the subject.

The achievement is all the more remarkable in view of the fact that the author is a lay woman, a practised writer who happened to take birth-control as her subject, but might equally well, one suspects, have taken bimetalism and made it not less intelligible to the uninstructed public.

Most of the chapters read like first-rate journalism, which means that Mrs. Bromley has nothing to learn about expedients for catching the reader's attention and for holding it when there is the least risk of its wandering elsewhere. One can imagine more promising material for a thriller than statistics on maternal and infant mortality, statistics on abortion, statistics on sterility, statistics on the prevalence of this and that contraceptive practice, statistics on the money spent on contraceptives, statistics on the alleged causal relation between contraception and fertility : yet this is a small selection from the material that Mrs. Bromley has woven into one of the most stimulating books on birth-control that have ever been written. The publishers' announcement describes it as "the first book to interpret and summarize in language the layman can understand, up-to-the-minute scientific data on birth-control and its allied problems." This, apart from the pardonable exaggeration involved in the

word "first," is a sober statement of fact. The work is furnished with an excellent bibliography. There is also a full index, but the chances are that the reader, like the reviewer, will add to it by making one of his own.

MICHAEL FIELDING.

## GENETICS

**Crane, M. B., and Lawrence, W. J. C.**  
*The Genetics of Garden Plants.* London, 1934. Macmillan & Co. Ltd.  
Pp. 236. Price 10s. 6d.

THIS book may be divided into two sections. The first, which includes the first three chapters, is an account of the genetical and cytological behaviour of diploids and polyploids, and the second comprises the chief facts known about the breeding behaviour of horticultural plants.

The earlier chapters serve as an introduction to cytology and genetics within certain limits. They are, as the title of the book implies, confined to plant behaviour, and such questions as sex, which are chiefly met with in the animal kingdom, are not dealt with. But the account of the principles of the twin sciences of cytology and genetics, though very concise and purely descriptive, is comprehensive and accurate. The discussion of chromatid segregation would, however, appear to merit some expansion, since the reader who is unfamiliar with the subject

may not follow its relationship to chromosome segregation.

The rest and most valuable part of the book is devoted to the breeding behaviour of garden plants. The information is extensive and efforts have been made to analyse and co-ordinate the work of different authors on certain plants, notably the potato. One novel and interesting feature is the inclusion of tables giving the history of the different variant types in connection with a number of the plants discussed. The section on incompatibility, which is largely based on the authors' own work with fruit, is outstanding both for its interest to the geneticist and for its use to the practical horticulturalist.

There is little doubt that this book will be of interest to the student, the breeder and the specialist. The emphasis which is laid on the rôle of polyploidy in the origin of new forms and in the behaviour of already existing ones will be of assistance to the breeder in many ways; the mass of information, collected together for the first time, will be invaluable to the specialist, and the student of plant genetics will seldom find a clearer exposition of its principles. The text may be somewhat difficult to follow at times on account of the brevity which is inevitable when so large a subject is compressed into a small volume, but the glossary of terms should assist considerably in this connection. The material has been carefully chosen and well put together.

K. MATHER.

